

KILM 7. Hours of work

Introduction

Two measurements related to working time are included in KILM 7 in order to give an overall picture of the time that the employed throughout the world devote to work activities. The first measure relates to the hours that employed persons work per week (table 7a) while the second measure is the average annual hours actually worked per person (table 7b). The statistics in 7a are presented separately for male and female; according to age group (total, youth and adult); and employment status (total, wage and salaried workers and self-employed). The following hour bands are applied in table 7a: less than 15 hours worked per week, between 15 and 29 hours, between 30 and 34 hours, between 35 and 39 hours, between 40 and 48 hours, and 49 hours and over, as available. Currently statistics for 98 economies are presented in table 7a and for 62 economies in table 7b.

Use of the indicator

Issues related to working time have received intensive attention following labour market dynamics triggered by the global economic crisis. Low and stable unemployment rates despite large drops in output in some advanced economies have been claimed to be related to flexibility in working time.¹ Beyond the medium run, the number of hours worked has an impact on the health and

well-being of workers.² Some persons in developed and developing economies working full-time have expressed concern about their long working hours and its effects on their family and community life.³ Additionally, the number of hours worked has an impact on workers' productivity and on the labour costs of establishments. Measuring the level and trends in working time in a society, for different groups of persons and for individuals, is therefore important when monitoring working and living conditions as well as for analysing economic and broader social developments.⁴

Employers have also shown interest in enhancing the flexibility of working arrangements. They are increasingly negotiating non-standard working arrangements with their workers.⁵ Employees may work only part of the year or part of the week, work at night or on weekends, or enter or leave the workplace at different times of the day. They may have variable daily or weekly schedules, perhaps as part of a scheme that fixes their total working time over a longer period, such as one month or one year. Consequently, employed persons' daily or weekly working time may show large variations, and a simple count of the number of people in employment or the weekly hours

¹ Hijzen, A. and Martin, S.: "The role of short-time work schemes during the global financial crisis and early recovery: a cross-country analysis", *IZA Journal of Labor Policy*, Vol. 2:5 (Bonn, Institute for the Study of Labor, 2013).

² Spurgeon, A.: *Working time: Its impact on safety and health* (Geneva, ILO, 2003); http://www.ilo.org/travail/whatwedo/publications/lang--en/WCMS_TRAVAIL_PUB_25/index.htm.

³ Messenger, J.C. (ed.): *Working time and workers' preferences in industrialized countries: Finding the balance* (Routledge, 2004).

⁴ ILO: *Report II: Measurement of working time*, 18th International Conference of Labour Statisticians, Geneva, November-December 2008; http://www.ilo.org/wcmsp5/groups/public/---dgreports/--stat/documents/publication/wcms_099576.pdf.

⁵ Policy suggestions that preserve health and safety, are family friendly, promote gender equality, enhance productivity and facilitate workers' choice and influence their working hours are provided in: Lee, S., McCann, D. and Messenger, J.: *Working time around the world* (Geneva, ILO, 2007).

of work is insufficient to indicate the level and trend in the volume of work.

“Excessive” working time may be a concern when individuals work more than a “normal” workweek due to inadequate wages earned from the job or jobs they hold. In table 7a, persons could be considered to work excessive hours if they fall within the the 49 hours and over band. (Workers within the 40 to 48 hours per week band are more debateable, and dependant, to a degree, on national circumstances. Only those at the upper end of the range could be safely categorized as working excessive hours.) Long hours can be voluntary or involuntary (when imposed by employers). “Inadequate employment related to excessive hours”, also called “over-employment” has been referred to as “a situation where persons in employment wanted or sought to work fewer hours than they did during the reference period, either in the same job or in another job, with a corresponding reduction of income”.⁶

Few countries have actually measured “over-employment” so the measure of persons in employment for more than 48 hours a week could be used as a proxy for persons in employment who usually work beyond what is considered “normal hours” in many countries. However, whether or not this situation is actually desired cannot be assessed, so nothing can be assumed about how many hours people might wish to work. Clearly, the number of hours worked will vary across countries and depends on, other than personal choice, such important aspects as cultural norms, real wages and levels of development.

Definitions and sources

Statistics on the percentage of persons in employment and in paid employment by hours worked per week (table 7a) are mostly calculated on the basis of information on employment and employees by actual-hour bands provided primarily by household-based surveys which cover all persons in employment (exceptions are identified in the notes to table 7a). In general, persons totally absent from work during the reference week are excluded. Annual hours actually worked per person (table 7b) are estimated from the results of both household and establishment surveys. For the most part, coverage comprises total employment or employees (wage earners and salaried workers).

The “actual hours of work” per week identify the time that persons in employment effectively spent directly on, and in relation to, productive activities; down time; and resting time during the corresponding reference period.. (see box 7).⁷ That is, the “actual hours of work” include time spent at the workplace on productive activities (“direct hours” in the resolution) and on other activities that are part of the tasks and duties of the job concerned (“related hours”). The latter can include, for example, cleaning and preparing working tools, certain on-call duties. The concept also includes time spent at the place of work when the person is inactive for reasons linked to the production process or work organization (“down time”), as during these periods paid workers, for example, still remain at the disposal of their employer while self-employed will continue working on other tasks and duties. “Hours actually worked” also include (“resting time”) short rest periods spent at the place of work as they are necessary for human beings and because they

⁶ ILO: *Final Report*, 16th International Conference of Labour Statisticians, Geneva, October 1998; <http://www.ilo.org/public/english/bureau/stat/download/16thicls/repconf.pdf>.

⁷ “Resolution concerning the measurement of working time”, adopted by the 18th International Conference of Labour Statisticians, Geneva, November-December 2008; http://www.ilo.org/global/What_we_do/Statistics/statistics/resolutions/lang--en/docName--WCMS_112455/index.htm. (See box 7 for a summary and relevant paragraphs.)

are difficult to distinguish separately, even if paid workers, for example, are not “at the disposal” of their employer during those periods. Explicitly excluded are lunch breaks if no work is performed, as they are normally sufficiently long to be easily distinguished from work periods. The international definition relates to all types of workers – whether in salaried or self-employment, paid or unpaid, and carried out in any location, including the street, field, home, etc.

For some countries, data are available only according to “hours usually worked”. This measure identifies the most common weekly working schedule of a person in employment over a selected period. The internationally-agreed statistical definition of “usual hours of work” refers to the hours worked in any job during a typical short period such as one week, over a longer period of time, or more technically, as the modal value of the “hours actually worked” per week over a longer observation period.

Average annual hours actually worked, as presented in table 7b, is a measure of the total number of hours actually worked during a year per employed person. The measure incorporates variations in part-time and part-year employment, in annual leave, paid sick leave and other types of leave, as well as in flexible daily and weekly working schedules. Conventional measures of employment and weekly hours worked (as in table 7a) cannot do so. Household-based surveys unless continuous are rarely able to measure accurately the hours actually worked by the population for a long reference period, such as a year. Establishment surveys may use longer reference periods than household surveys but do not cover the whole working population unlike household surveys. Consequently, the “average annual hours actually worked” is often estimated on the basis of statistics from both sources.

The Organisation for Economic Co-operation and Development (OECD) is the source of most estimates of annual hours actually worked per person in table 7b. The

OECD estimates for nine countries⁸ reproduced in table 7b are based on National Accounts questionnaires that measure hours worked by employed persons (employees and self-employed) in domestic production during one year. Hours worked refer to production within effective and normal working hours, with addition for overtime while deducting absences due to sickness, leave of absence, vacations and any labour conflicts. The estimated hours generated are the same that are used by national accountants as input for the calculation of productivity (output per hour worked). Additional countries provide data based on their own series that are consistent with the National Accounts (Canada, Finland, France, Germany, Norway, and Sweden).

OECD estimates for Belgium, Ireland, Luxembourg, the Netherlands and Portugal apply a second estimation procedure, taking information from legislation or collective agreements that concern “normal hours”. This consists of multiplying the weekly “normal hours” (measured in the European Labour Force Survey) by the number of weeks that workers have been in employment during the year. Annual leave and public holidays are subtracted to obtain a net amount of “annual normal time”. Estimates of overtime obtained from sources such as household or establishment surveys are added, and estimates of time taken in substantial forms of absences, obtained from household surveys or administrative sources, are then subtracted. In practice, some additional adjustments may be needed when the “normal hours” vary over the year.

The remainder of OECD country estimates are based on statistics for time actually worked for each week of the year, derived from continuous household surveys. Statistics for a month or quarter when used need to be adjusted for the number of working days in that period. Further adjustments are made for public holidays and strike activity, normally on the basis of information obtained from administrative sources. The resulting

8. Austria, Denmark, Greece, Italy, Republic of Korea, Slovenia, Spain, Switzerland and Turkey.

estimates may then be added up to obtain the total annual “hours actually worked”, which is then divided by the average number of employed persons during the year.

Limitations to comparability

Statistics based on hours actually worked are not strictly comparable to statistics based on hours usually worked. A criterion using hours actually worked will generally yield a higher weekly average than usual hours, particularly if there are temporary reductions in working time as a result of holiday, illness, etc. that will have an impact on the measure of average weekly hours. Seasonal effects will also play an important role in fluctuations in hours actually worked. In addition, the specification of main job or all jobs may be an important one. In some countries, the time cut-off is based on hours spent in the main job; in others on total hours spent in all jobs. Measures may therefore reflect hours actually or usually worked in the main job or in all jobs. Because of these and other differences that may be specific to a particular country, cross-country comparison in table 7a should be undertaken with great care.

The different estimation methods for annual hours of work depend to a large extent on the type and quality of the information available and may lead to estimates that are not comparable. All estimates presented are derivations from numbers gathered from surveys and other sources, usually produced within the national statistical agency. It is difficult to evaluate the impact of estimation differences on their comparability across countries.

The various data collection methods also represent an important source of variation in the working time estimates. Household-based surveys (including the population census) that obtain data from working persons or from other household members can and often cover the whole population, thus including the self-employed. As they use the information

respondents provide, their response may contain substantial errors. On the other hand, the data obtained from establishment surveys depend on the type, range and quality of their records on attendance and payment. While consistency in reporting overtime may be higher, the information may contain undetected biases. Furthermore, their worker coverage is never complete, as these surveys tend to cover medium-to-large establishments in the formal sector with regular employees, and exclude managerial and peripheral staff as well as self-employed persons.

Comparability of statistics on working time is complicated even further by the fact that estimates may be based on more than one source – results may be taken primarily from a household survey and supplemented with information from an establishment survey (or other administrative source) or vice versa. In such cases, more than one survey type is noted in the corresponding column of the notes. For these reasons, the OECD, which provided the majority of the national estimates presented, is careful to note that “the data [on average annual hours worked per person] are intended for comparisons of trends over time; they are unsuitable for comparisons of the level of average annual hours of work for a given year, because of differences in their sources”.⁹

⁹ See Statistical Annex of the annual publication OECD: *Employment Outlook*.

Box 7. Resolution concerning the measurement of working time, adopted by the 18th International Conference of Labour Statisticians, November-December 2008

Summary

In 2008, the International Conference of Labour Statisticians (ICLS) adopted the resolution concerning the measurement of working time. The resolution revises the existing standards on statistics of hours of work (Resolution concerning statistics of hours of work, adopted by the 13th ICLS, 1962) in order to reflect the working time of persons in all sectors of the economy and in all forms of productive activity towards the achievement of decent work for all, and to provide measurement methodologies and guidelines on a larger number of measures than previously defined internationally, thereby enhancing the standards' usefulness as technical guidelines to States and the consistency and international comparability of related statistics.

The resolution provides definitions for seven concepts of working time associated with the productive activities of a person and performed in a job:

- *Hours actually worked*, the key concept of working time defined for statistical purposes applicable to all jobs and to all working persons;
- *Hours paid for*, linked to remuneration of hours that may not all correspond to production;
- *Normal hours of work*, refers to legally prevailing collective hours;
- *Contractual hours of work*, individuals are expected to work according to contractual relationships as distinct from normal hours;
- *Hours usually worked*, most commonly in a job over a long observation period,
- *Overtime hours of work*, performed beyond contracts or norms; and
- *Absence from work hours*, when working persons do not work;

It also provides definitions for two concepts of working-time arrangements that describe the characteristics of working time in a job, namely the *organization* and *scheduling* of working time, regardless of type of job, and formalized working-time arrangements, that are specific combinations of the characteristics having legal recognition.

Relevant paragraphs

Concepts and definitions

Hours actually worked

11.

- (1) *Hours actually worked* is the time spent in a job for the performance of activities that contribute to the production of goods and/or services during a specified short or long reference period. **Hours actually worked applies to all types of jobs (*within and beyond the SNA production boundary*)** and is not linked to administrative or legal concepts.
- (2) Hours actually worked measured *within the SNA production boundary* includes time spent directly on, and in relation to, productive activities; down time; and resting time.
 - (a) "Direct hours" is the time spent carrying out the tasks and duties of a job. This may be performed in any location (economic territory, establishment, on the street, at home) and during overtime periods or other periods not dedicated to work (such as lunch breaks or while commuting).
 - (b) "Related hours" is the time spent maintaining, facilitating or enhancing productive activities and should comprise activities such as:
 - (i) cleaning, repairing, preparing, designing, administering or maintaining tools, instruments, processes, procedures or the work location itself; changing time (to put on work clothes); decontamination or washing up time;
 - (ii) purchasing or transporting goods or basic materials to/from the market or source;
 - (iii) waiting for business, customers or patients, as part of working-time arrangements and/or that are explicitly paid for;

- (iv) on-call duty, whether specified as paid or unpaid, that may occur at the work location (such as health and other essential services) or away from it (for example from home). In the latter case, it is included in hours actually worked depending on the degree to which persons' activities and movements are restricted. From the moment when called back for duty, the time spent is considered as direct hours of work;
 - (v) travelling between work locations, to reach field projects, fishing areas, assignments, conferences or to meet clients or customers (such as door-to-door vending and itinerant activities);
 - (vi) training and skills enhancement required by the job or for another job in the same economic unit, at or away from the work location. In a paid-employment job this may be given by the employer or provided by other units.
- (c) "Down time", as distinct from "direct" and "related hours", is time when a person in a job cannot work due to machinery or process breakdown, accident, lack of supplies or power or Internet access, etc., but continues to be available for work. This time is unavoidable or inherent to the job and involves temporary interruptions of a technical, material or economic nature.
- (d) "Resting time" is time spent in short periods of rest, relief or refreshment, including tea, coffee or prayer breaks, generally practised by custom or contract according to established norms and/or national circumstances.
- (3) Hours actually worked measured *within the SNA production boundary* excludes time not worked during activities such as:
- (a) Annual leave, public holidays, sick leave, parental leave or maternity/paternity leave, other leave for personal or family reasons or civic duty. This time not worked is part of absence from work hours (defined in paragraph 17);
 - (b) Commuting time between work and home when no productive activity for the job is performed; for paid employment, even when paid by the employer;
 - (c) Time spent in educational activities distinct from the activities covered in paragraph 11. (2) (b) (vi); for paid employment, even when authorized, paid or provided by the employer;
 - (d) Longer breaks distinguished from short resting time when no productive activity is performed (such as meal breaks or natural repose during long trips); for paid employment, even when paid by the employer.

Hours usually worked

15.

- (1) *Hours usually worked* is the typical value of hours actually worked in a job per short reference period such as one week, over a long observation period of a month, quarter, season or year that comprises the short reference measurement period used. Hours usually worked applies to all types of jobs (*within and beyond the SNA production boundary*).
- (2) The typical value may be the modal value of the distribution of hours actually worked per short period over the long observation period, where meaningful.
- (3) Hours usually worked provides a way to obtain regular hours worked above contractual hours.
- (4) The short reference period for measuring hours usually worked should be the same as the reference period used to measure employment or household service and volunteer work.